IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in the above referenced application.

1. (Withdrawn) A light-emitting device comprising:

a semiconductor structure including at least one p-type layer and one n-type layer; and

a p contact and an n contact, the p contact electrically connected to the p-type layer, the n contact electrically connected to the n-type layer, wherein at least one of the p and n contacts is a multi-layered contact external to the semiconductor structure, the multi-layered contact comprising:

a metallic reflector layer;

a continuous uniform conducting sheet adjacent to the semiconductor structure, wherein the continuous uniform conducting sheet comprises a metal and makes ohmic contact to the structure; and

a conductive barrier layer interposing the reflector layer and the continuous uniform conducting sheet;

wherein the multi-layer contact has a reflectivity greater than 75% for light at an operating wavelength of the light-emitting device.

2. (Canceled).

3. (Withdrawn) A device, as defined in claim 1, wherein the multi-layer contact has a specific contact resistance less than 10^{-2} Ω-cm^2.

4. (Canceled).

5. (Withdrawn) A device, as defined in claim 1, wherein the reflector layer has a thickness greater than 500 Å.

6. (Withdrawn) A device, as defined in claim 1, wherein the continuous uniform conducting sheet has a thickness less than 200 Å.

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7. (Withdrawn) A device, as defined in claim 1, wherein the reflector layer is selected from the group consisting of Al, Cu, Rh, Pd, and Au.

8. (Withdrawn) A device, as defined in claim 1, wherein the p and n contacts are on opposing faces of the semiconductor structure.

9. (Withdrawn) A device, as defined in claim 8, wherein the continuous uniform conducting sheet comprises Ni and Ag.

10. (Withdrawn) A device, as defined in claim 8, wherein the reflector layer comprises Ag.

11. (Currently Amended) A light-emitting semiconductor device comprising:

a semiconductor structure having at least one p-type and one n-type layer; and

a p contact and an n contact, the p contact electrically connected to the p-type layer, the n contact electrically connected to the n-type layer, wherein at least one of the p and n contacts is a multi-layer contact external to the semiconductor structure, the multi-layer contact comprising:

a metallic reflector layer comprising Ag; and

a continuous uniform conducting sheet adjacent to the semiconductor structure, wherein the continuous uniform conducting sheet comprises Ni and makes ohmic contact to the structure;

wherein the multi-layer contact has a reflectivity greater than 75% for light at an operating wavelength of the light-emitting device and a specific contact resistance less than 10^{-2} Ω-cm^2.

12-13. (Canceled).

14. (Previously Presented) A device, as defined in claim 11, the multi-layer contact further comprising a barrier layer interposing the reflector layer and the continuous uniform conducting sheet.

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15. (Original) A device, as defined in claim 11, the reflector layer having a thickness greater than 500 Å.

16. (Previously Presented) A device, as defined in claim 11, wherein the continuous uniform conducting sheet has a thickness less than 200 Å.

17. (Cancelcd).

18. (Previously Presented) A device, as defined in claim 11, wherein the continuous uniform conducting sheet is selected from the group that consists of Au/NiO and Ni/Au.

19. (Withdrawn) A device, as defined in claim 1, wherein the semiconductor structure includes at least one III-nitride layer.

20. (Previously Presented) A device, as defined in claim 11, wherein the semiconductor structure includes at least one III-nitride layer.

21. (Withdrawn) A device, as defined in claim 1, wherein the continuous uniform conducting sheet absorbs less than 25% of light generated in the semiconductor structure and incident on the continuous uniform conducting sheet.

22. (Withdrawn) A device, as defined in claim 19, wherein a voltage required to forward bias the device is less than 3.5 V.

23. (Withdrawn) A device, as defined in claim 1, wherein the continuous uniform conducting sheet has thickness less than 100 Å.

24. (Withdrawn) A device, as defined in claim 1, wherein:

the continuous uniform conducting sheet comprises Au and has a thickness less than 35 Å;

the conductive barrier layer comprises Rh and has a thickness less than 50 Å; and

the metallic reflector layer comprises Al.

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25. (Withdrawn) A device, as defined in claim 8, wherein at least a portion of the n contact overlies at least a portion of the p contact.

26. (Canceled).

27. (Canceled).

28. (Previously Presented) A device, as defined in claim 11, wherein the continuous uniform conducting sheet absorbs less than 25% of light generated in the semiconductor structure and incident on the continuous uniform conducting sheet.

29. (Previously Presented) A device, as defined in claim 20, wherein a voltage required to forward bias the device is less than 3.5 V.

30. (Previously Presented) A device, as defined in claim 11, wherein the continuous uniform conducting sheet has thickness less than 100 Å.

31. (Currently Amended) A light-emitting semiconductor device comprising:

a semiconductor structure having at least one p-type and one n-type layer; and

a p contact and an n contact, the p contact electrically connected to the p-type layer, the n contact electrically connected to the n-type layer, wherein at least one of the p and n contacts is a multi-layer contact external to the semiconductor structure, the multi-layer contact comprising:

a metallic reflector comprising Al; and

a continuous uniform conducting sheet adjacent to the semiconductor structure, wherein the continuous uniform conducting sheet comprises Ni and makes ohmic contact to the structure;

wherein the multi-layer contact has a reflectivity greater than 75% for light at an operating wavelength of the light-emitting device and a specific contact resistance less than 10^{-2} Ω-cm^2.

32-34. (Canceled).

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35. (Previously Presented) A device, as defined in claim 31, wherein:

the continuous uniform conducting sheet comprises Au.

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